

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

00965.10.0003

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on July 28, 2005

Signature

Typed or printed name

Michael J. Turgeon

Application Number

09/840,433

Filed

04/23/2001

First Named Inventor

Yao Yu

Art Unit

2661

Examiner

Ian N. Moore

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒

attorney or agent of record.

Registration number 39,404☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Signature

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Typed or printed name

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Telephone number

July 28, 2005

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

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*Total of _____ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Yao Yu et al.
Serial No. 09/840,433
Filing Date: April 23, 2001
Confirmation No.: 4176

Examiner: Ian N. Moore
Art Unit: 2661
Docket No.: 00965.10.0003

Title: **METHOD FOR CONTROLLING OUTER LOOP POWER**

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7/28/05 Michael J. Turgeon
Date Michael J. Turgeon

REASONS FOR REQUESTING A PRE-APPEAL BRIEF REVIEW

Dear Sir:

Applicants are filing this paper concurrently with a Pre-Appeal Brief Request for Review (form PTO/SB/33) and a Notice of Appeal. For the reasons set forth below, Applicants submit that the Examiner has not established a clear *prima facie* case in rejecting claims 1-4 and 11. In particular, Applicants submit that the prior art upon which the Examiner relies does not disclose or even suggest a number of limitations recited in claim 1.

Claim 1 of the present application recites the following:

1. A method for controlling outer loop power, comprising the following steps of:
 - a) measuring a BER, and calculating an error between measured BER and a target BER and a variance value of the error;
 - b) determining a grade of the error and a grade of the variance value of the error;
 - c) calculating a grade of a SNR threshold adjusting step value in accordance with the grade of the error and the grade of the variance value of the error;
 - d) determining an actual SNR threshold adjusting step value based on the calculated grade of the SNR threshold adjusting step value; and
 - e) adjusting a SNR threshold in accordance with the actual SNR threshold adjusting step value.

With regard to step (a), the present application calculates a “variance value of the error.” In contrast, neither Vembu nor Dohi discloses or even suggests a “variance value of the error.” Applicants presented detailed arguments in this regard in the response to the first Office action, pages 16 and 17, and the response to the final Office action, page 3 at the paragraph that begins with “Moreover, ...” and ending on page 4 at the paragraph that begins with “Moreover,”

Additionally, Applicants submit that a “variance value of the error” is not time dependent. A “variance value of the error” generally indicates the dispersion pattern or trend of the error in a certain range that can remain true regardless of the time periods by which the error is sampled. In contrast, Dohi discloses calculating a moving average of the bit error rate (BER), which not only is a time dependent parameter, but also does not indicate the dispersion of error in a certain range. A moving average is an average value of data over a time span. A moving average calculation can typically show the trend in data and possibly predict the path the average will take in time. However, a moving average cannot determine a dispersion trend in the data for a certain range. Furthermore, a moving average cannot show a trend in the movement of the data in time that is contrary to the direction of the moving average. In other words, if the data is increasing with time, i.e., increasing moving average, the moving average can only show the upward trend in the data. Any future downward trend in the data cannot be predicted with a moving average calculation. By calculating the “variance value of the error,” however, the present application can predict the error if the trend in error should behave contrary to a past and currently sampled error.

With regard to steps (b) and (c) of claim 1, the present application determines a “grade of the error” and a “grade of the variance value of the error.” The grades that are determined in step (b) are then used in step (c) to determine a “grade of a SNR threshold adjusting step value.” In

contrast neither Vembu nor Dohi determines a “grade of the error,” a “grade of the variance value or the error” and “a grade of a SNR threshold adjusting step value .” Applicants presented detailed arguments in this regard in the response to the first Office action, page 17 at paragraph that begins with “Claim 1 also features ...”, and the response to the final Office action, page 3 at the paragraph that begins with “First, Claim 1 features ...” and ending on page 3 at the paragraph that ends with “Moreover”

Furthermore, Applicants submit that the Examiner has completely failed to show how any one of Vembu and Dohi discloses “a grade” for any error related parameters and the resulting SNR adjustment step calculations. The present application determines in step (b) a “grade” for the error and a “grade” for the variance value of the error after calculating the error and the variance value of the error in step (a). In rejecting claim 1 over Vembu and Dohi, the Examiner has interpreted the word “grade” to mean any parameter without relying on the Specification, and in particular, pages 7-9 to interpret the word “grade.” As stated in the *MPEP* § 2111.02, an applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning. Further, if the specification provides definitions for terms appearing in the claims, it can be used in interpreting claim language. Applicants submit the Examiner has failed to interpret the word “grade” consistent with the definition of “grade” as provided in the Specification.

Applicants submit that the Examiner has failed to appreciate, completely ignored, and/or erroneously lumped together steps (a)-(d) of Claim 1. If the Examiner is relying on Dohi’s calculation of the moving average of BER as being the same as calculating “variance of the error” as recited in step (a), then how can steps (b) and (c), wherein the “grades” of the error parameters are calculated be disclosed or suggested by Dohi? In essence, the Examiner has

removed steps (b) and (c) from claim 1 to support his rejection of claim 1 based on Vembu and Dohi. Alternatively, the Examiner has erroneously lumped together steps (a)-(d) by arguing that these steps are disclosed by Dohi because Dohi calculates a change in BER and the moving average of the BER.

Again, with reference to the Specification at pages 7-9, step (b) determines grades for the error and the variance value of the error. Based on the grades that are determined in step (b), step(c) then determines a grade of a SNR threshold adjusting step value. It is subsequently in step (d) that the present application calculates an actual SNR threshold adjusting step value based on the calculated grade of the SNR threshold adjusting step value of step (c). In contrast, Dohi uses the change in BER and the moving average of the BER to directly calculate the actual SIR adjusting step. Therefore, Dohi does not determine grades for any of its error related variables prior to determining its actual SIR adjusting step.

With regard to step (d), as discussed in the foregoing, the present application determines a grade of the SNR threshold adjusting step, which is then used to determine an actual SNR threshold adjusting step. In contrast, neither Vembu nor Dohi discloses determining a grade of the SNR threshold adjusting step prior to determining the actual SNR threshold adjusting step.

Summary and conclusion

For any one of the foregoing reasons, claim 1 is patentable over Vembu, Dohi, or a combination thereof. Applicants further submit, that the present application as recited in claim 1, provides the intermediate steps of determining grades for a number of error related variables, or as disclosed in the specification “fuzzifying” the recited error related variables, to determine a grade of the SNR threshold adjusting step. Subsequently, the present application performs “defuzzifying” of the grade of the SNR threshold adjusting step to determine an actual SNR

threshold adjusting step. Such intermediate steps as recited in claim are not disclosed or even suggested by Vemby and Dohi. In summary, Applicants submit the following:

Claim 1 recites in step (a) calculating a "variance value of the error." In contrast, neither Vemby nor Dohi discloses calculating a variance value of the error. Dohi discloses calculating a moving average of the BER, which as described in the foregoing, is significantly different from calculating a "variance value of the error."

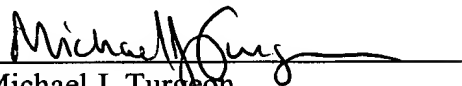
Claim 1 recites in steps (b) and (c) determining a grade of the error and a grade of the variance value of the error, and calculating a grade of a SNR threshold adjusting step value in accordance with the grade of the error and the grade of the variance value of the error. Both Vemby and Dohi do not disclose or even suggest these two steps.

Claim 1 recites in step (d) determining an actual SNR threshold adjusting step value based on the calculated grade of the SNR threshold adjusting step value. Neither Vemby nor Dohi discloses or even suggests calculating an actual SNR threshold adjusting step value based on a grade of the SNR threshold adjusting step value.

With respect to dependent claims 2-4, and 11, Applicants submit that these claims are believed to be allowable on their merits and also due to their dependency ultimately on independent claim 1.

In light of the foregoing, Applicants respectfully request allowance of claim 1-4 and 11.

Respectfully submitted,

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Date: *July 28, 2005*

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